WHAT IS CLAIMED IS:

1. An image processing method comprising:

setting a common coordinate system which can be transformed from individual coordinate systems of a plurality of image sensing devices;

estimating postures of at least one of the plurality of image sensing devices;

calculating an estimated posture of the common coordinate system using at least one of the estimated posture of the plurality of image sensing devices;

calculating a correction transform for reducing a shakiness of the common coordinate system using the estimated posture of the common coordinate system;

calculating a correction transform for reducing a shakiness of each of the plurality of image sensing devices using the correction transform;

applying the corresponding correction transform to a sensed image which is sensed by each of the plurality of image sensing devices; and

composing a panoramic image by joining a plurality of transformed sensed images.

2. An image processing method comprising:

setting a common coordinate system which can be transformed from individual coordinate systems of a plurality of image sensing devices;

estimating postures of at least one of the plurality of image sensing devices;

calculating an estimated posture of the common coordinate system using at least one of the estimated posture of the plurality of image sensing devices;

calculating a correction transform for reducing a shakiness of the common coordinate system using the estimated posture of the common coordinate system;

composing a panoramic image by joining a plurality of sensed images, which are sensed by the plurality of image sensing devices; and

applying the correction transform for reducing a shakiness of the common coordinate system to the panoramic image.

3. The method according to claim 1 or 2, wherein the correction transform for reducing a shakiness of each of the common coordinate system or the plurality of image sensing devices is a transform for correcting roll and pitch angles.

4. The method according to claim 1 or 2, wherein the correction transform for reducing a shakiness of each of the common coordinate system or the plurality of image sensing devices is a transform for correcting yaw, roll and pitch angles.

5. The method according to claim 1 or 2, wherein positions of the plurality of image sensing devices and common coordinate systems are also estimated upon estimating the postures.

6. The method according to claim 5, wherein the correction transform for reducing a shakiness of each of the common coordinate system and the plurality of image sensing devices is a transform for correcting yaw, roll, and pitch angles, and the position.

7. An image processing apparatus comprising:

setting unit adapted to set a common coordinate system which can be transformed from individual coordinate systems of a plurality of image sensing devices;

estimation unit adapted to estimate postures of at least one of the plurality of image sensing devices;

first calculation unit adapted to calculate an estimated posture of the common coordinate system using at least one of the estimated posture of the plurality of image sensing devices;

second calculation unit adapted to calculate a correction transform for reducing a shakiness of the common coordinate system using the estimated posture of the common coordinate system;

third calculation unit adapted to calculate a correction transform for reducing a shakiness of each of the plurality of image sensing devices using the correction transform;

application unit adapted to apply the corresponding correction transform to a sensed image

which is sensed by each of the plurality of image sensing devices; and

composition unit adapted to compose a panoramic image by joining a plurality of transformed sensed images.

8. An image processing apparatus comprising:

setting unit adapted to set a common coordinate system which can be transformed from individual coordinate systems of a plurality of image sensing devices;

estimation unit adapted to estimate postures of at least one of the plurality of image sensing devices;

first calculation unit adapted to calculate an estimated posture of the common coordinate system using at least one of the estimated posture of the plurality of image sensing devices;

second calculation unit adapted to calculate a correction transform for reducing a shakiness of the common coordinate system using the estimated posture of the common coordinate system;

composition unit adapted to compose a panoramic image by joining a plurality of sensed images, which are sensed by the plurality of image sensing devices; and

application unit adapted to apply the correction transform for reducing a shakiness of the common coordinate system to the panoramic image.

9. A computer program for making a computer function as an image processing apparatus of claim 7.

10. A computer program for making a computer function as an image processing apparatus of claim 8.

11. A computer readable storage medium storing a computer program of claim 9.

12. A computer readable storage medium storing a computer program of claim 10.

13. An imaging apparatus comprising:

a plurality of image sensing devices;

a processor for composing a stabilized panoramic image; and

a display device for displaying the panoramic image,

wherein said processor composes the panoramic image by performing the steps of:

setting a common coordinate system which can be transformed from individual coordinate systems of a plurality of image sensing devices;

estimating postures of at least one of the plurality of image sensing devices;

calculating an estimated posture of the common coordinate system using at least one of the estimated posture of the plurality of image sensing devices;

calculating a correction transform for reducing a shakiness of the common coordinate system using the estimated posture of the common coordinate system;

calculating a correction transform for reducing a shakiness of each of the plurality of image sensing devices using the correction transform;

applying the corresponding correction transform to a sensed image which is sensed by each of the plurality of image sensing devices; and

composing the stabilized panoramic image by joining a plurality of transformed sensed images.

14. An imaging apparatus comprising:

a plurality of image sensing devices;

a processor for composing a stabilized panoramic image; and

a display device for displaying the panoramic image,

wherein said processor composes the panoramic image by performing the steps of:

setting a common coordinate system which can be transformed from individual coordinate systems of the plurality of image sensing devices;

estimating postures of at least one of the plurality of image sensing devices;

calculating an estimated posture of the common coordinate system using at least one of the estimated posture of the plurality of image sensing devices;

calculating a correction transform for reducing a shakiness of the common coordinate system using the estimated posture of the common coordinate system;

composing a panoramic image by joining a plurality of sensed images, which are sensed by the plurality of image sensing devices; and

applying the correction transform for reducing a shakiness of the common coordinate system to the panoramic image in order to compose the stabilized image.